Worksheet for Planning Lot & Sublot Distribution of QC/QA Superstructure Concrete in Metric Units

Contract No. _____ Total Plan Quantity of QC/QA Superstructure Concrete_____ m^3

Number of CMD's required _____

First CMD to be used, __ of __			Second CMD to be used, __ of __		
Construction Phase	Structure No.	Plan Quantity m^3	Construction Phase	Structure No.	Plan Quantity m^3
		Σ = _____ m^3			Σ = _____ m^3
		÷ 120.0 m^3			÷ 120.0 m^3
		_____			_____

1. If decimal portion is less than 0.434, round the result down to nearest whole number to determine the number of Lots. The last Lot of a CMD will contain 3 or 4 Sublots

2. If decimal portion is equal to or greater than 0.434, round the result up to the nearest whole number to determine the number of Lots. The last Lot of a CMD will be less than the standard quantity, consist of 2 or 3 Sublots, and likely will have one Sublot of partial size.

3. An individual Sublot cannot contain less than 12.1 m^3 or more than 52.0 m^3.

4. The last Lot for a CMD is required to have at least 2 Sublots, but never more than 4 Sublots.

CMD __ of __										
Sublot Nos.	Quantities (m^3) within Lot Nos.									
	1	2	3	4	5	6	7	8	9	10
1										
2										
3										
4										
Σ										

CMD ___ of ___										
Sublot Nos.	Quantities (m^3) within Lot Nos.									
	1	2	3	4	5	6	7	8	9	10
1										
2										
3										
4										
Σ										

INDIANA DEPARTMENT OF TRANSPORTATION
MATERIALS AND TEST DIVISION

RANDOM SAMPLING FOR SUPERSTRUCTURE CONCRETE (METRIC UNITS)

Contract No. _____ Str. No. _____ Construction Phase ___ CMD ____ of _____

QC/QA Superstructure Quantity for Phase (z) _____ m^3

Phase Construction Dimensions: Length (l) $\frac{\text{_____}}{1000}$ mm = _____ m, Width (w) $\frac{\text{_____}}{1000}$ mm = _____m

Average Depth (d) = $\frac{z}{l \times w}$ = _____ m

Lot No. ____ Lot Size _____ m^3 Number of Sublots _____

Sublot No.	Sublot Size (m^3)	Cumulative Quantity of Ph/Str (m^3)	Remainder Quantity (m^3)	Random No.	Random Quantity Within Sublot (m^3)	Random Distance From Start of Ph/Str (m)	Sublot Location	
							Begin (m)	End (m)
	A	B	z-B	C	D = AxC	$\frac{(D-A+B)}{w \times d}$		$\frac{B}{w \times d}$
1								
2								
3								
4								

* Sublot information that carries over to the next construction phase or structure placement.

** Acceptance sample location will be obtained during next construction phase or structure placement.